TRANSPORTATION AIR QUALITY CONFORMITY ANALYSIS

FOR

2005 Transportation Improvement Program/Amendment #05-16

DRAFT: November 1, 2005

FINAL: December 21, 2005



Joseph P. Bort MetroCenter 101 Eighth Street Oakland, CA 94607-4700 V PHONE 510.817.5700 TTY/TDD 510.817.5769 FAX 510.817.5848 WEB www.mtc.ca.gov

	Transportation	Air Quality Conformity Analysis
For 2005	Transportation	Improvement Program/Amendment #05-16

This page intentionally left blank.

TABLE OF CONTENTS

I. SUMMARY OF CONFORMITY ANALYSIS	Page 5
II. RESPONSE TO COMMENTS	9
II. RESPONSE TO COMMENTS III. CONFORMITY FINDINGS APPENDIX	10
APPENDIX A. List of Projects to be Amended into 2005 Transportation Improvement Program/Amendment #05-16	A-1

Transportation Air Quality Conformity Analysis For 2005 Transportation Improvement Program/Amendment #05-16

This page intentionally left blank.

I. SUMMARY OF CONFORMITY ANALYSIS

The federally required Transportation Improvement Program (TIP) is a comprehensive listing of all Bay Area transportation projects that receive federal funds or that are subject to a federally required action, or are considered regionally significant for air quality conformity purposes. The current 2005 TIP was developed to be consistent with MTC's Transportation 2030 Plan, the region's 25-year strategic investment plan for transportation projects in the nine-county San Francisco Bay Area. The Federal Highway Administration and the Federal Transit Administration approved the 2005 TIP on October 4, 2005. Amendment 05-16 amends four (4) non-exempt projects and five (5) exempt projects into the TIP (see Appendix A-1).

Since the 2005 TIP/Amendment #05-16 does not include any new regionally significant projects beyond those currently included in the Transportation 2030 Plan, and these projects have been modeled in the appropriate horizon year using the latest planning assumptions, MTC is using the conformity analysis for the Transportation 2030 Plan and 2005 TIP, as amended through Amendment #05-05. The latest conformity analysis is included in the report "Final Transportation Air Quality Conformity Analysis for Transportation 2030 Plan and 2005 Transportation Improvement Program/Amendment #05-05", hereinafter referred to as the "Conformity Report." The Federal Highway Administration and Federal Transit Administration approved MTC's conformity determination for the Transportation 2030 Plan and 2005 TIP/Amendment #05-05 on March 17, 2005.

For purposes of the conformity analysis, we state for the record:

- 1. <u>Latest Planning Assumptions, Emissions Model and Budget Comparison.</u> No new regional emission analysis was necessary for this conformity determination. As stated above, this conformity determination is based on the regional emissions analysis performed for the Transportation 2030 Plan and 2005 TIP/Amendment #05-05. Please refer to the above referenced Conformity Report for the details of this analysis.
- 2. <u>TCM Implementation:</u> TCMs A-E in the approved 2001 Ozone Attainment Plan are to be implemented by 2006 and are on schedule. All information on the timely implementation of TCMs in the Conformity Report is still current. Please refer to the above referenced Conformity Report for the details of this analysis.

- 3. Reliance on the Previous Regional Emissions Analysis: Since the conformity determination for the 2005 TIP/Amendment 05-16 relies on the previous regional emissions analysis, MTC is required to meet the requirements of 40 CFR §93.122(g), which are as follows:
 - (g) Reliance on previous regional emissions analysis.
 - (1) Conformity determinations for a new transportation plan and/or TIP may be demonstrated to satisfy the requirements of §§93.118 ("Motor vehicle emissions budget") or 93.119 ("Interim emissions in areas without motor vehicle emissions budgets") without new regional emissions analysis if the previous regional emissions analysis also applies to the new plan and/or TIP. This requires a demonstration that:
 - (i) The new plan and/or TIP contain all projects which must be started in the plan and TIP's timeframes in order to achieve the highway and transit system envisioned by the transportation plan;
 - (ii) All plan and TIP projects which are regionally significant are included in the transportation plan with design concept and scope adequate to determine their contribution to the transportation plan's and/or TIP's regional emissions at the time of the previous conformity determination;
 - (iii) The design concept and scope of each regionally significant project in the new plan and/or TIP are not significantly different from that described in the previous transportation plan; and
 - (iv) The previous regional emissions analysis is consistent with the requirements of §§93.118 (including that conformity to all currently applicable budgets is demonstrated) and/or 93.119, as applicable.
 - (2) A project which is not from a conforming transportation plan and a conforming TIP may be demonstrated to satisfy the requirements of §93.118 or §93.119 without additional regional emissions analysis if allocating funds to the project will not delay the implementation of projects in the transportation plan or TIP which are necessary to achieve the highway and transit system envisioned by the transportation plan, the previous regional emissions analysis is still consistent with the requirements of §93.118 (including that conformity to all currently applicable budgets is demonstrated) and/or §93.119, as applicable, and if the project is either:
 - (i) Not regionally significant; or
 - (ii) Included in the conforming transportation plan (even if it is not specifically included in the latest conforming TIP) with design concept and scope adequate to determine its contribution to the transportation plan's regional emissions at the time of the transportation plan's conformity determination, and the design concept and scope of the project is not significantly different from that described in the transportation plan.

The 2005 TIP/Amendment #05-16 meets these requirements:

- The TIP contains all projects, which must be started in the TIP's timeframe in order to achieve the highway and transit system envisioned by the transportation plan.
- All TIP projects which are regionally significant are included in the Transportation 2030 Plan and have a design concept and scope adequate to determine their contribution to the Transportation 2030 Plan's regional emissions at the time of the regional transportation plan's conformity determination.
- The design concept and scope of each regionally significant project in the TIP is not significantly different from those described in the Plan.
- All projects in the 2005 TIP/Amendment #05-16 are from a conforming Plan. Allocating funds to these projects will not delay the implementation of projects in the Plan or TIP, which are necessary to achieve the highway and transit system envisioned by the Plan.
- 4. Results of Previous Regional Emissions Analysis Comparing the Motor Vehicle
 Emissions to Budgets: Motor vehicle emissions in the Bay Area must not exceed the
 applicable budgets measured in tons per day for volatile organic compounds (VOCs),
 nitrogen oxides (NOx) and carbon monoxide (CO) as contained in the State
 Implementation Plan (SIP). The vehicle activity forecasts (Table 2) and motor vehicle
 emissions calculations (Tables 3A and 3B) for the previous emissions analysis are
 provided below. The results of the previous regional emissions analysis show that
 regional emissions are below the applicable budgets. Note that the budgets and
 required analysis years have not changed from the Conformity Report. Please refer to
 the above referenced Conformity Report for details on this analysis.

TABLE 2
VEHICLE ACTIVITY FORECASTS

VEHICLE ACTIVITY FORECASTS							
2006	2007	2015	2025	2030			
5,174,552	5,254,933	5,980,372	6,794,924	7,214,686			
175,634	177,996	198,168	219,917	231,159			
34,497,645	34,966,827	39,133,333	43,459,300	45,629,130			
	2006 5,174,552 175,634	2006 2007 5,174,552 5,254,933 175,634 177,996	2006 2007 2015 5,174,552 5,254,933 5,980,372 175,634 177,996 198,168	2006 2007 2015 2025 5,174,552 5,254,933 5,980,372 6,794,924 175,634 177,996 198,168 219,917			

TABLE 3A
EMISSIONS BUDGET COMPARISONS FOR OZONE
(TONS/DAY WITH BUDGETS BASED ON SF BAY AREA-EMFAC 2000 AND ON ROAD
MOTOR VEHICLE EMISSIONS USING MORE CURRENT EMFAC 2002, V2.2)

Year	VOC	On-Road Motor	TCMs**	Net Emissions
	Budget*	Vehicles VOC		
2006	164.0	129.5	(0.3)	129.2
2007	164.0	119.4	(0.3)	119.4
2015	164.0	69.9	(0.3)	69.6
2025	164.0	44.9	(0.3)	44.6
2030	164.0	38.0	(0.3)	37.7

Year NO _X Budget* On-Road Motor			TCMs**	Net Emissions
		Vehicles NO _X		
2006	270.3	253.7	(0.5)	253.2
2007	270.3	235.0	(0.5)	234.8
2015	270.3	125.6	(0.5)	125.1
2025	270.3	67.3	(0.5)	66.8
2030	270.3	55.4	(0.5)	54.9

^{*} Source: 2001 Ozone Attainment Plan

TABLE 3B EMISSIONS BUDGET COMPARISONS FOR CARBON MONOXIDE

Year	1998 CO Budget*	Estimated CO
2006	2,193	1,352.3
2010 (interpolated)	2,193	1,046.1
2015	2,193	663.3
2025	2,193	353.8
2030	2,193	295.8

^{*} Source: 1998 Revision to the 1996 Carbon Monoxide Maintenance Plan for 10 Federal Planning Areas

Source: MTC, Final Transportation Air Quality Conformity Analysis for Transportation 2030 Plan and 2005 Transportation Improvement Program/Amendment #05-05 (February 11, 2005)

- 5. <u>Financial Constraint</u>. The 2005 TIP is financially constrained based on revenue estimates from the State at the time of its preparation. The 2005 TIP covers the three fiscal years FY 2004-05 through FY 2006-07. The Federal Highway Administration and the Federal Transit Administration approved the 2005 TIP on October 4, 2005. Amendment 05-16 amends four (4) non-exempt projects and five (5) exempt projects into the TIP.
- 6. <u>Interagency and Public Consultation</u>. The prior regional conformity analysis leading to FHWA and FTA's approval in March 2005 underwent extensive agency and public consultation as documented in the Conformity Report. For 2005 TIP/Amendment

^{**}The transit services for TCM A Regional Express Bus Program were modeled. The emission benefits from TCM A are therefore included in the On-Road Motor Vehicles VOC and NOx emission inventories for 2006 and beyond.

#05-16, MTC initially consulted on this amendment with its Air Quality Conformity Task Force on October 26, 2005, and subsequently solicited its review of this conformity analysis through e-mail exchange on November 1, 2005. MTC held a public hearing on the Draft 2005 TIP/Amendment 05-05 and this conformity analysis on December 14, 2005 at the Programming and Allocations Committee meeting prior to approval by the Commission on December 21, 2005.

II. RESPONSE TO COMMENTS

The Draft Conformity Analysis for 2005 TIP/Amendment #05-16 was released for a 44-day public review and comment period beginning on November 1, 2005 and ending at 1:00 pm on December 14, 2005. A public hearing on the 2005 TIP/Amendment #05-05 and the Draft Conformity Analysis was held before MTC's Programming and Allocations Committee on December 14, 2005.

MTC staff received the following comments on the Draft Conformity Analysis:

Technical Clarifications

Comment: Add statement to page 7, section 4 stating that the budgets and required analysis years have not changed from the Conformity Report, and add a footnote identifying which SIP the ozone budgets are from.

Response: Revisions have been incorporated into this Final Conformity Analysis.

The Final Conformity Analysis was presented to the Commission for approval on December 21, 2005, and then submitted to the Federal Highway Administration and Federal Transit Administration for joint review as required by 40 CFR 93.104 and 23 CFR 450.322 of the FHWA/FTA Statewide and Metropolitan Planning Rule.

III. CONFORMITY FINDINGS

Based on the previous referenced analysis, the following findings are made:

- This transportation air quality conformity analysis was conducted consistent with EPA's regulations and with the Bay Area Air Quality Conformity Procedures adopted by MTC in Resolutions No. 2730 and Resolution No. 3075.
- The 2005 TIP/Amendment #05-16 provides for implementation of TCMs pursuant to the following federal regulation:
 - (1) An examination of the specific steps and funding source(s) needed to fully implement each TCM indicates that TCMs which are eligible for funding under title 23 U.S.C. or the Federal Transit Laws are on or ahead of the schedule established in the applicable implementation plan, or, if such TCMs are behind the schedule established in the applicable implementation plan, the MPO and DOT have determined that past obstacles to implementation of the TCMs have been identified and have been or are being overcome, and that all State and local agencies with influence over approvals or funding for TCMs are giving maximum priority to approval or funding to TCMs over other projects within their control, including projects in locations outside the non-attainment or maintenance area.
 - (2) If TCMs in the applicable implementation plan have previously been programmed for Federal funding but the funds have not been obligated and the TCMs are behind the schedule in the implementation plan, then the TIP cannot be found to conform if the funds intended for those TCMs are reallocated to projects in the TIP other than TCMs, or if there are no other TCMs in the TIP, if the funds are reallocated to projects in the TIP other than projects which are eligible for Federal funding intended for air quality improvements projects, e.g., the Congestion Mitigation and Air Quality Improvement Program.
 - (3) Nothing in the TIP may interfere with the implementation of any TCM in the applicable implementation plan. (40 CFR Part 93.113(c)).
- MTC's 2005 TIP/Amendment #05-16 conforms with the 2001 Ozone Attainment Plan and 1998 Carbon Monoxide Maintenance Plan.

Appendix A: List of Projects To Be Amended into the 2005 TIP Amendment #05-16

TIP ID	RTP ID	AQ Status	Sponsor	Project Name	Reason For Amendment		Funding Change	
CC-979030	94553	Non-Exempt, Not Regionally Significant	Brentwood	Walnut Blvd Widening & Reconstruction	Amend project back into the TIP using 1st Cycle STP/CMAQ Augmentation funds of 600k plus local match.	\$	1,470,000	
SM-979013	94656	Non-Exempt, Not Regionally Significant	Caltrans	Devil's Slide Bypass	Amend project back into the TIP, revise year of programmed funds moving Emergency Relief Program funds from FY04 into FY06.	\$	-	
SF-010007	98527	Non-Exempt, Not Regionally Significant	Port of SF	Illinois St Intermodal Bridge at Islais	Amend project back into the TIP using SAFETEA Earmark funds of \$3.2m and update project funding.	\$	15,633,710	
SM-050044	22262	Non-Exempt, Regionally Significant*	SMCTA	Ramp Metering on Route 101	Amend new project into the TIP using \$500k in Regional Operations TOS funding transferred from MTC030003.	\$	565,000	
ALA050059	21011	Exempt	Caltrans	Median Landscaping on Rt. 13	Amend in new project using \$500k of STP Funds plus local match.	\$	565,000	
SCL050030	94609	Exempt	Milpitas	S. Park Victoria Drive Rehabilitation	Revise project limits and local funds.	\$	(562,000)	
SF-050029	21502	Exempt	SF City/County	Pine Lake Trail Improvement Project	Amend new project into the TIP using Recreation Trails Program Grant.	\$	408,000	
SF-050030	94090	Exempt	SF City/County	Pedestrian Safety and Access Education Program	Amend new project into the TIP using RTIP-TEA funding.	\$	303,000	
SF-050031	94090	Exempt	SF City/County	Stockton Tunnel Lighting & Ped. Imprv.	Amend new project into the TIP using RTIP-TEA funding.	\$	882,000	

Total Funding Change \$ 19,264,710

^{*}Modeled with the correct design concept and scope and in the correct timeframe in the Transportation 2030 Plan.